Dimâge Scan Dual

Windows Version

Thank you for purchasing the Minolta Dimâge Scan Dual. The Dimâge Scan Dual is a dual format film scanner capable of scanning 35mm and, with the optional AD-10 APS Adapter, Advanced Photo System film.

This manual has been designed to help you understand the operation of your scanner. To realize all the benefits of your scanner, please read this manual thoroughly.

Your scanner has been packaged with the DS Dual twain driver software for Adobe Photoshop™/ Adobe PhotoDeluxe™. Before using the Minolta Dimâge Scan Dual, we recommend you have a working knowledge of the PC and its operating conventions. Familiarity with the mouse and Windows® menus and commands is necessary before operating the Minolta Dimâge Scan Dual driver software.

This manual does not instruct in the basic use of the PC, the Windows® 95, Windows® 98, or Windows NT® operating systems, Adobe Photoshop™ , or Adobe PhotoDeluxe™.

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Corel Draw™ is a trademark of the Corel Corporation.
Other corporate and product names are the trademarks and registered trademarks of their respective companies.

- Changes or modifications not approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This manual may not be copied in part or whole without prior written permission from Minolta Co., Ltd. ©1997 Minolta Co., Ltd.
- Every necessary caution has been taken to ensure the accuracy of this instruction manual. Please contact us if you have any questions, find any errors, or notice missing information.
- Minolta is not responsible for loss, damage, or other results occurring during the operation of this product.

CE This mark certifies that this product meets the requirements of the EU (European Union) concerning interference causing equipment regulations. CE stands for Conformité Européenne.

Film Scanner: Dimâge Scan Dual

FC Tested to comply with FCC standards.

FOR HOME OR OFFICE USE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
To meet FCC regulations, the SCSI cables used with this scanner must be equipped with ferrite cores.

This Class B digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Tested by the Minolta Corporation
101 Williams Drive
Ramsey, New Jersey 07446
USA

FOR PROPER AND SAFE USE

Please read and understand each caution before using this product.

⚠ CAUTION

To avoid fire or electric shock:

- **Only use the voltage specified for this unit.**
- **Do not expose this unit to liquids.**
- **Do not insert metal objects into this unit.**
- **Do not touch the cord or plug if your hands are wet.**
- **Unplug this unit when it is not in use.**

Improper use of the power cord may result in fire or electric shock.

- **Insert the plug securely into an electrical outlet.**
- **Do not pull on the cord. Grasp the plug when removing the power cord from an outlet.**
- **Do not scratch, twist, modify, heat, or place a heavy object on the power cord.**
- **Do not connect the ground to a gas pipe, telephone ground, or a water pipe. Improper grounding can result in electric shock.**

This product must have sufficient ventilation while in use. Blocked ventilation ducts may cause the unit to overheat, increasing the risk of fire.

- **Do not use or store this product in dusty or very humid areas.**

If there is smoke, a strange smell, or any other unusual conditions, shut down and unplug the unit, then contact a Minolta Service Facility.

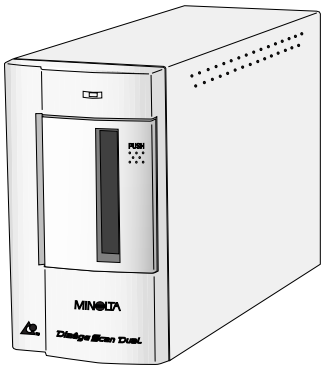
Do not attempt to disassemble this product. It contains high-voltage circuits. Take the product to a Minolta Service facility for repairs.

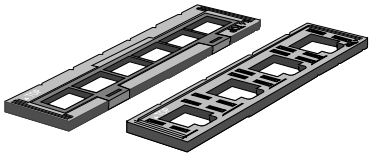
Unexpected damage may occur if this unit is left unattended near young children.

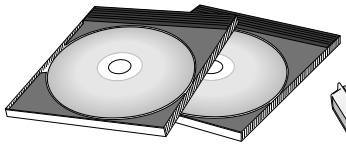
PACKAGE CONTENTS / SYSTEM REQUIREMENTS

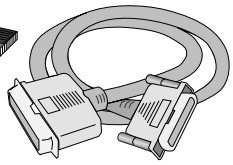
The following contents should be included in this package.

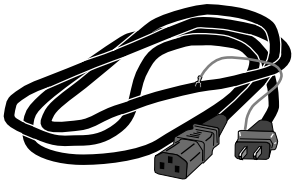
1. Minolta Dimâge Scan Dual
2. 35mm Slide and Negative holders
3. SCSI cable SC-11
4. AC power cord
5. DS Dual installer CD ROM
6. Instruction Manuals (2)
7. Warranty card
8. Photoshop LE CD ROM

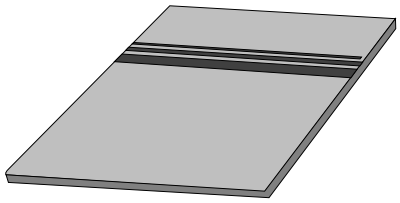


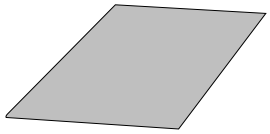












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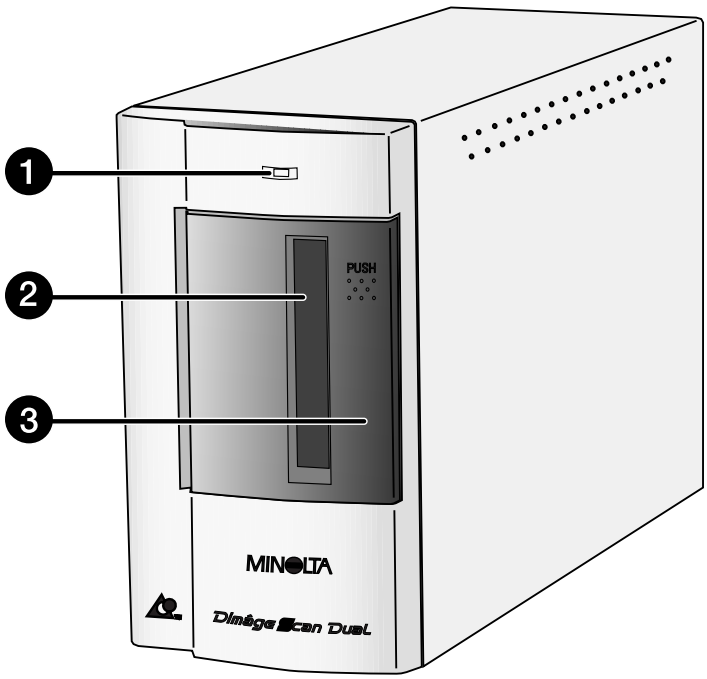
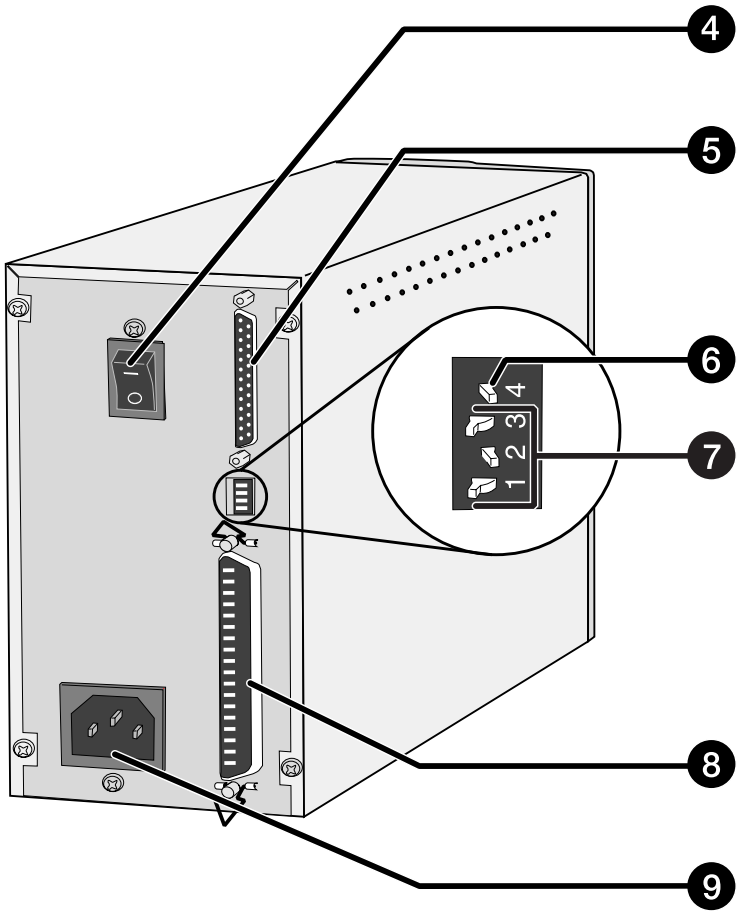
SCANNER - NAMES OF PARTS

1. Indicator lamp
2. Film slot
3. Film door
4. Power switch
5. SCSI port - DB25
6. Terminator power switch
7. SCSI ID switches
8. SCSI port - SCSI-1
9. AC socket





SCANNER SETUP

SETTING THE SCSI ID

A SCSI ID is a unique address you assign to each SCSI device connected to your PC. The SCSI ID range of your PC is from 0 to 7. Do not use a SCSI ID for more than one SCSI device.

Turn off the PC and all the devices in the SCSI chain down before changing SCSI IDs, connecting, or disconnecting SCSI cables. Hardware damage may occur if this precaution is not followed.

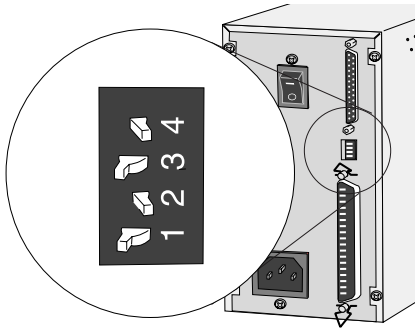
Setting the SCSI ID

1. Turn off the PC and all connected SCSI devices.

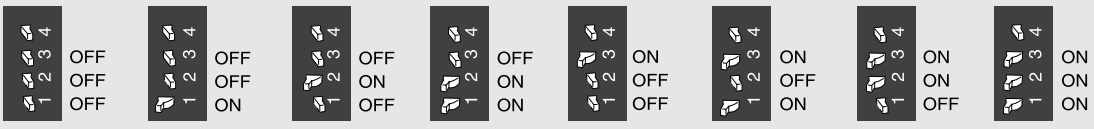
2. Determine which SCSI IDs are not being used.

3. Using a pointed object, set the switches to an unused SCSI ID.

- The Dimâge Scan Dual's SCSI ID is factory preset to 5. If 5 is not occupied, there is no need to change the SCSI ID.
- Two operating SCSI devices in the same SCSI chain cannot share a SCSI ID.



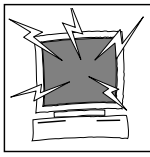
SCSI ID Dip Switch Settings



Connecting the SCSI Cable

The SCSI cable SC-11 (DB25-to-SCSI-1) has been packaged with the Dimâge Scan Dual. See your dealer if you require a different SCSI cable.

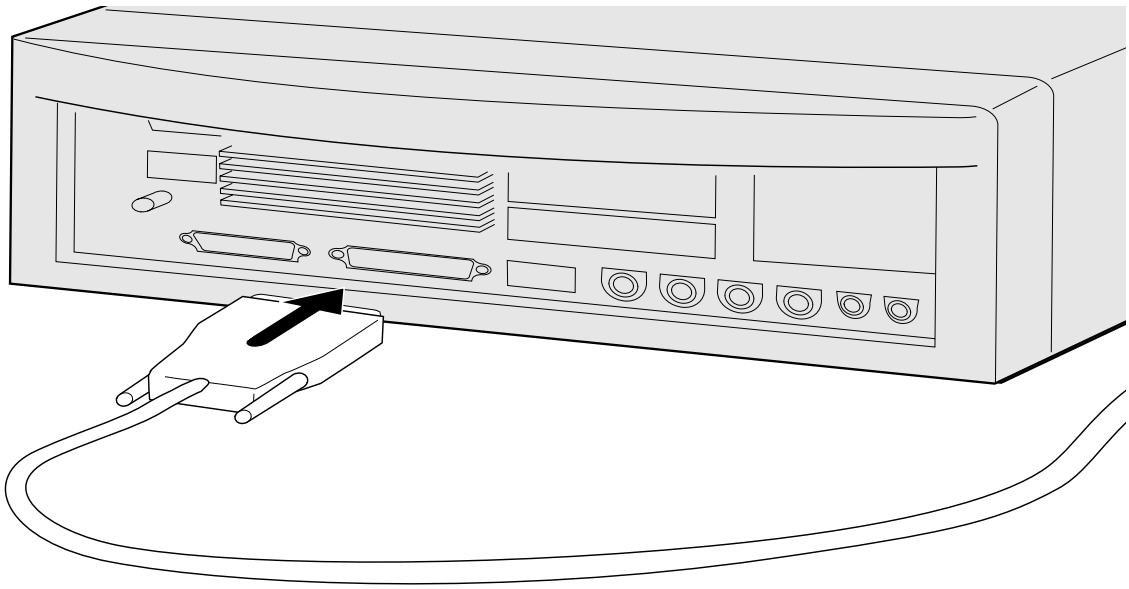
- To meet FCC regulations, the SCSI cables used with this scanner must be equipped with ferrite cores.



BEFORE YOU BEGIN…
TURN THE COMPUTER AND ALL CONNECTED DEVICES OFF.

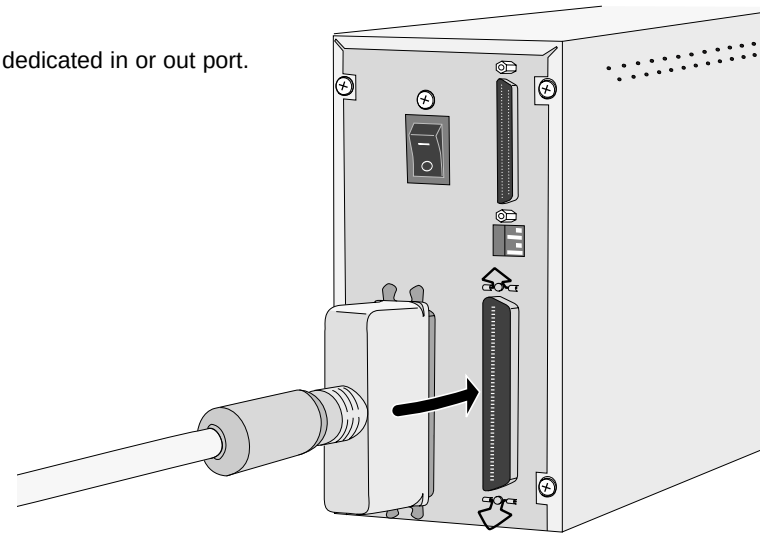
1. Place the scanner on a level surface.

2. Plug the SCSI cable SC-11 into the SCSI port on the rear of the PC.



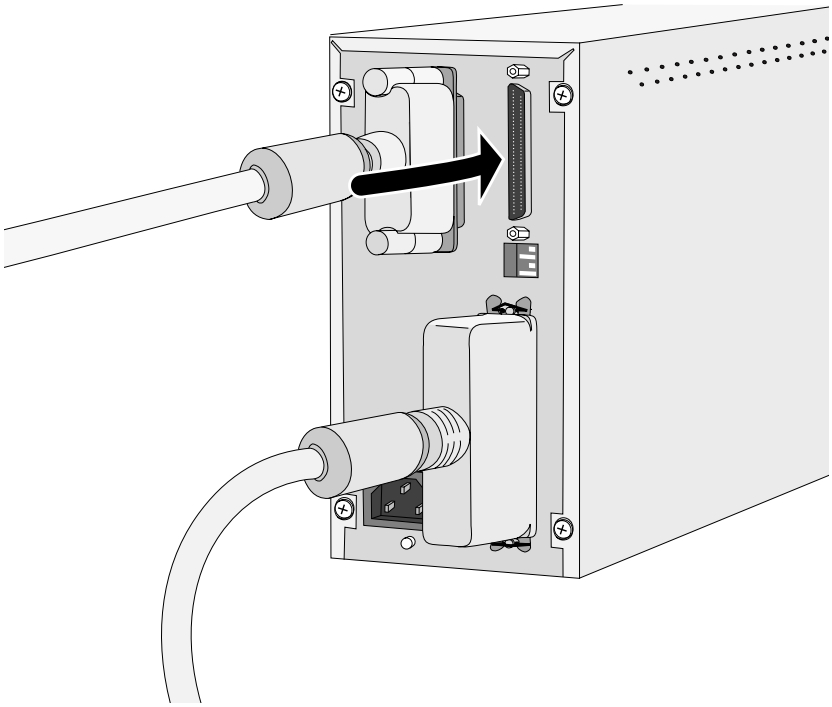
3. Plug the other end of the SCSI cable) into the back of the scanner.

- Either SCSI port can be used, there is no dedicated in or out port.

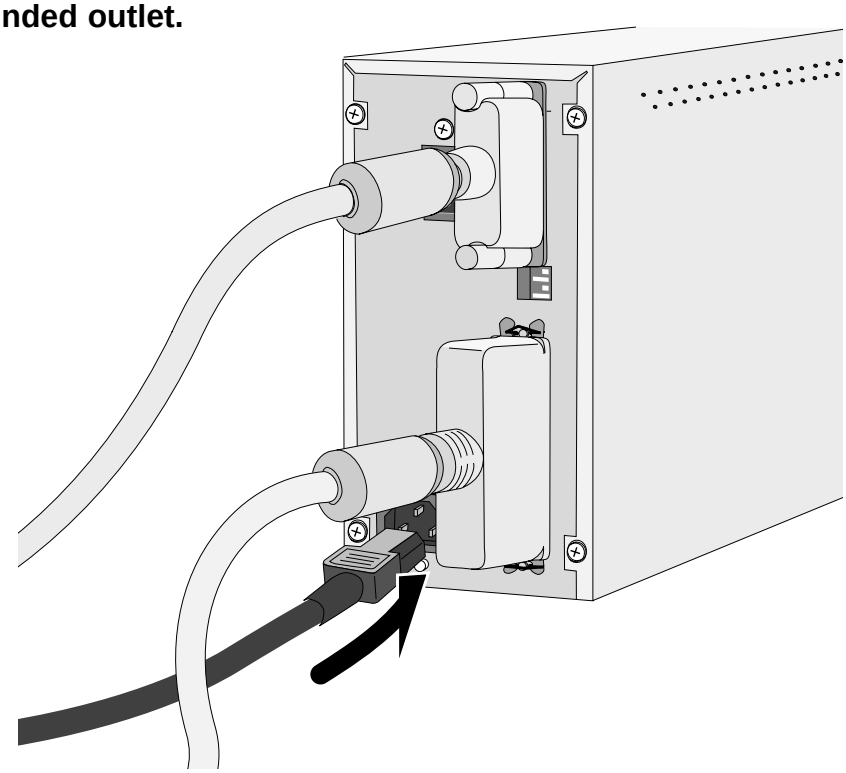


If there are other devices in your SCSI chain…

4. **Plug the SCSI cable from the next device in your SCSI chain into the open port on the back of the scanner.**



5. **Plug the power cord into the scanner's AC socket, then plug it into a grounded outlet.**



If the Dimâge Scan Dual is the last or only device in your SCSI chain…

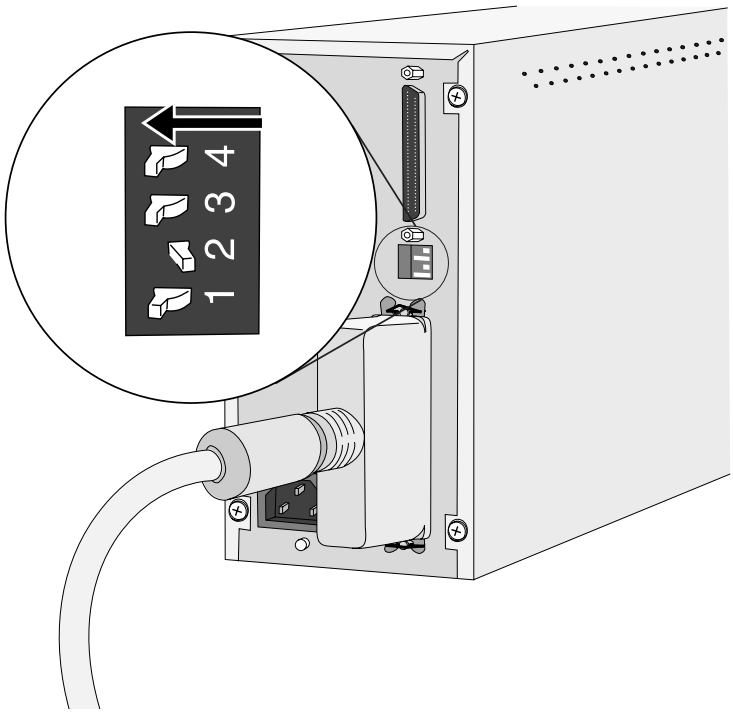
4. Turn the terminator power switch (switch 4) to ON.

- An external terminator is not necessary with this scanner.

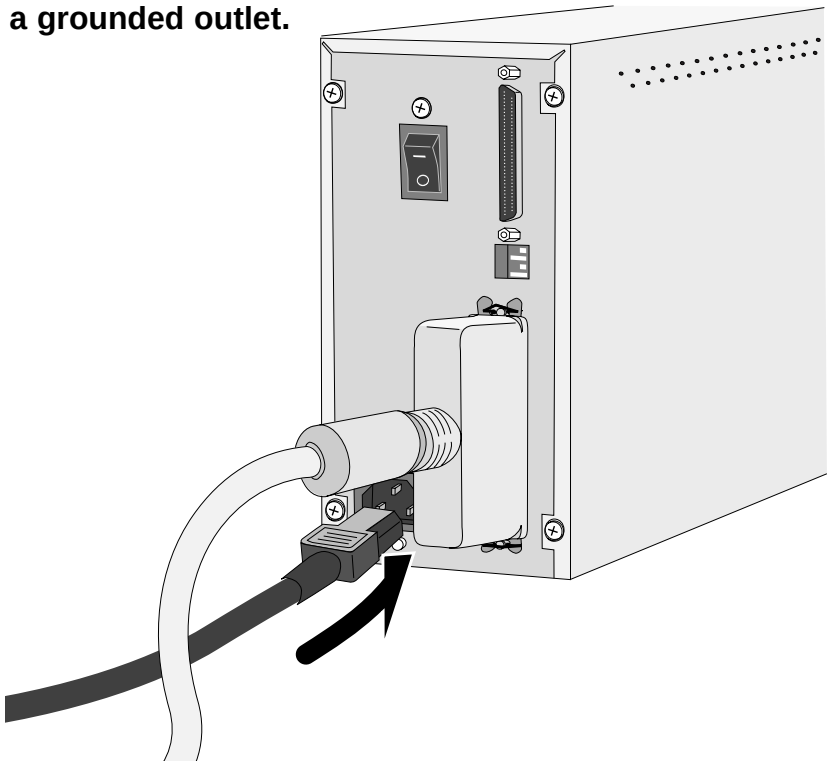
NOTE:

Terminating the SCSI chain helps to suppress electronic noise in the SCSI chain.

Not terminating the SCSI chain can cause slowdowns, data errors, crashes, and other unpredictable errors.



5. Plug the power cord into the scanner's AC socket, then plug it into a grounded outlet.



INSTALLING THE SOFTWARE

Dimâge Scan Dual for Windows Setup installs the Twain and Twain_32 driver software into the drive and folder you select.
Photoshop, PhotoDeluxe, Corel DRAW, or Corel PhotoPaint should be installed before you launch this installer.

- The appearance and/or wording of some dialog boxes may vary depending on the version of Windows running on your machine.
- The install instructions assume drive D is the CD ROM drive.

1. Turn on the Dimâge Scan Dual, then turn on your PC.

2. Start Windows.

This step varies with your specific operating software...

Windows 95

- The New Hardware Found dialog box will appear.

New Hardware Found
Unknown Device
Select which driver you want to install for your new hardware:
Windows default driver
Driver from disk provided by hardware manufacturer
Do not install a driver (Windows will not prompt you again)
Select from a list of alternate drivers
OK
Cancel
Help

3. Click on Cancel.

- This dialog box may appear several times. Repeat step 3 until the dialog box no longer appears.

Windows 95 Release 2 (OSR2) and Windows 98

- The Device Wizard dialog box will appear.

Update Device Driver Wizard
This wizard will complete the installation of:
Unknown Device
by searching your local drives, network, and Internet locations for the most current driver.
If you have a disk or CD-ROM that came with this device, insert it now.
It is recommended that you let Windows search for an updated driver. To do this, click Next to continue.
< Back
Next >
Cancel

3. Click on Next until the Unknown Device window appears…

then click on Finish.

- This dialog box may appear several times. Repeat step 3 until the dialog box no longer appears.

Windows NT

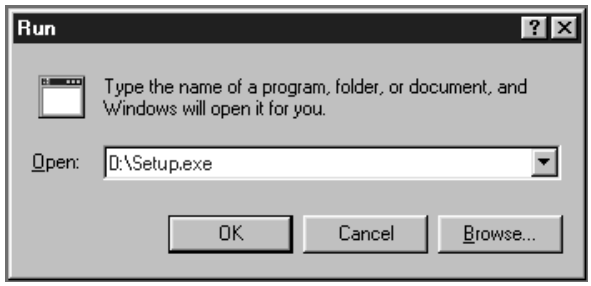
3. Select Start > Settings > Control Panel, then double-click on the SCSI Adapters icon. Confirm that Minolta #2882 appears as a connected device for your SCSI board.

- If Minolta #2884 does not appear, turn the system off and check all the connections. Repeat the procedure.

4. Insert the Dimâge Scan Speed CD-ROM into the CD-ROM drive.

5. Select Run from the Start menu.

The Run dialog box will appear.



6. Select D:\ENGLISH\Setup.exe from the Open drop-down list, then click on OK.

- If your CD-ROM drive is not the D drive, replace the D with the appropriate designation for your CD-ROM drive.

The installer flash will appear.

7. Click on Next >.

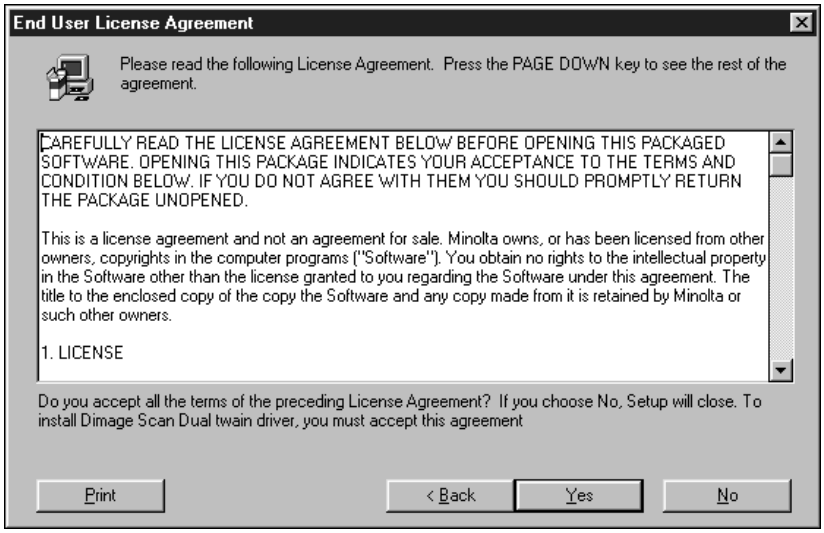
Continued on the following page.

The Welcome dialog box will appear.

Welcome
Welcome to Minolta Dimage Scan Dual Ver.2.0. This program will install Dimage Scan Dual twain driver on your computer.
It is strongly recommended that you exit all windows program before running this Setup program.Click Cancel to quite Setup and then close any programs you having. Click Next to continue with the setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil criminal penalties, and will be prosecuted to the maximum extent possible under low.
< Back
Next >
Cancel

8. Click on Next >.

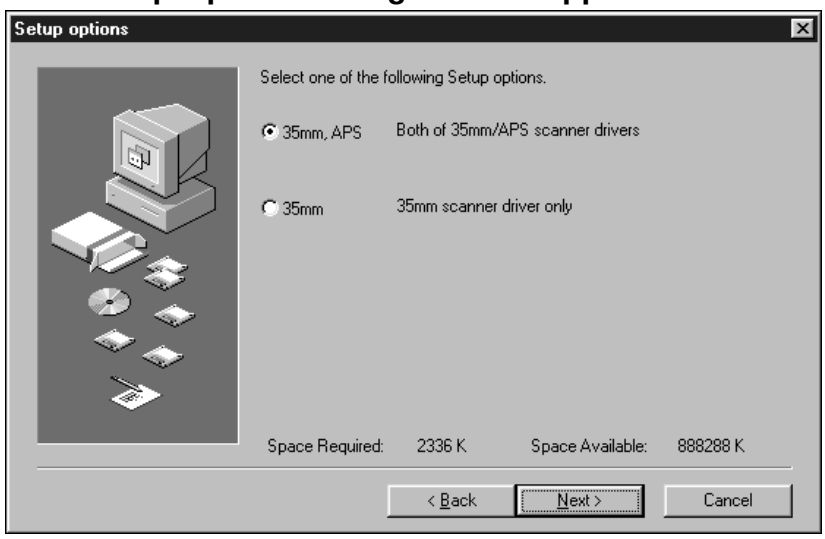
The Software License Agreement will appear.


End User License Agreement
Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.
CAREFULLY READ THE LICENSE AGREEMENT BELOW BEFORE OPENING THIS PACKAGED SOFTWARE. OPENING THIS PACKAGE INDICATES YOUR ACCEPTANCE TO THE TERMS AND CONDITION BELOW. IF YOU DO NOT AGREE WITH THEM YOU SHOULD PROMPTLY RETURN THE PACKAGE UNOPENED.
This is a license agreement and not an agreement for sale. Minolta owns, or has been licensed from other owners, copyrights in the computer programs ("Software"). You obtain no rights to the intellectual property in the Software other than the license granted to you regarding the Software under this agreement. The title to the enclosed copy of the copy the Software and any copy made from it is retained by Minolta or such other owners.
1. LICENSE
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install Dimage Scan Dual twain driver, you must accept this agreement
Print
< Back
Yes
No

9. After reading the agreement, click on Yes.

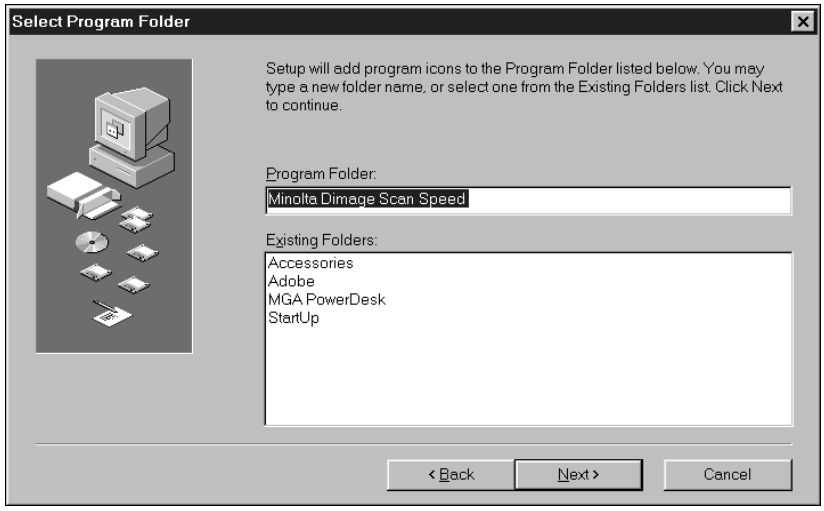
- If you do not agree to the conditions stated in the End-User License Agreement, click on No and the software will not be installed.

The Setup Options dialog box will appear.



10. Select the desired option, then click on Next >.

The Select Program Folder dialog box will appear.


Select Program Folder
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the Existing Folders list. Click Next to continue.
Program Folder:
Minolta Dimage Scan Speed
Existing Folders:
Accessories
Adobe
MGA PowerDesk
StartUp
< Back
Next >
Cancel

11. Click on Next >.

- Setup will begin.

Continued on the following page.

The Setup Successful dialog box will appear.

12. Click on Close **.**

The following dialog box will appear.

Minolta Dimage Scan Dual Ver.2.0 Setup
You must shut down and restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

13. Click on Yes **.**

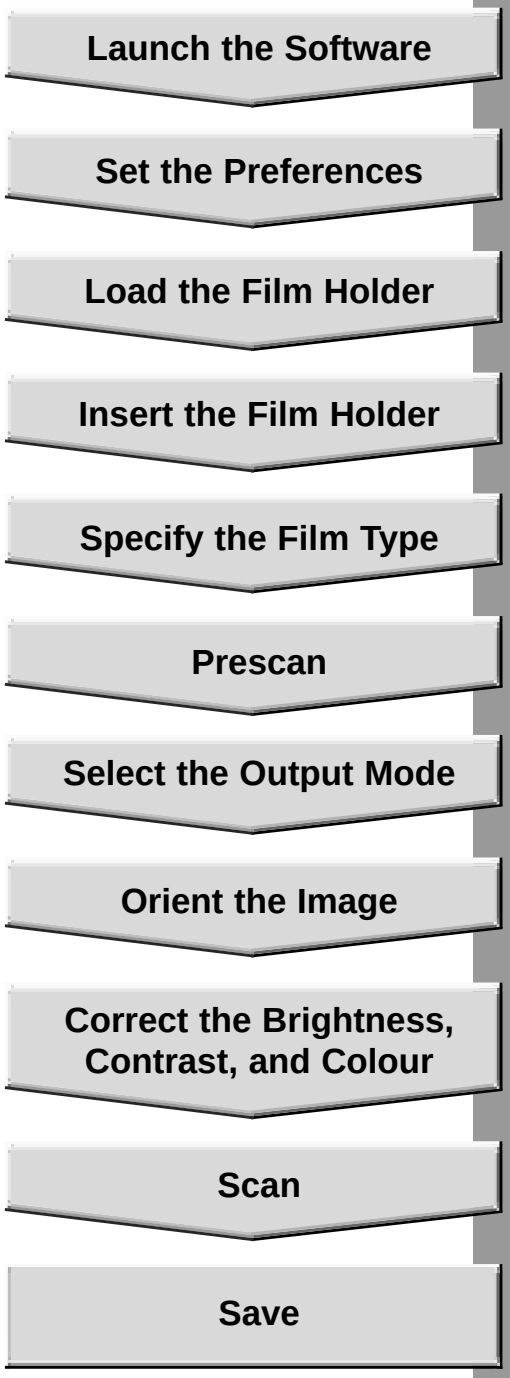
Dimage Scan Dual for Window Setup has placed the following files onto your computer.

DSDual.ds
DSDual.du
DSDual.hlp
dsd_tw.ini
Twain.dll
Twain_32.dll
Twunk_16.exe
Twunk_32.exe
readme.txt

Please read the Read Me file before proceeding with this manual.

STANDARD OPERATION

SCAN FLOW



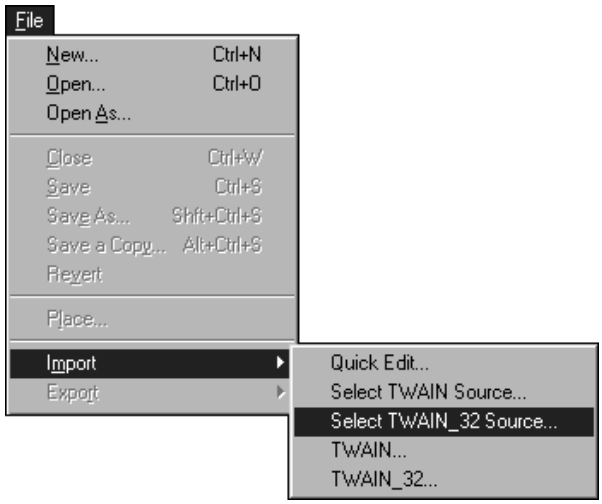
LAUNCHING THE SOFTWARE

The following instructions detail the import procedure for Adobe Photoshop. Refer to the online manual to import images into Adobe PhotoDeluxe.

1. **Turn on the Minolta Dimâge Scan Dual, then turn on your PC.**

2. **Launch Adobe Photoshop.**

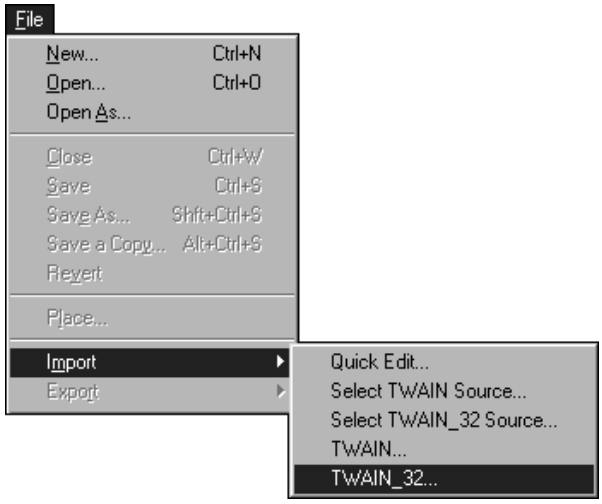
3. **Select File > Import > Select Twain_32 Source**



The Select Source dialog box appears.

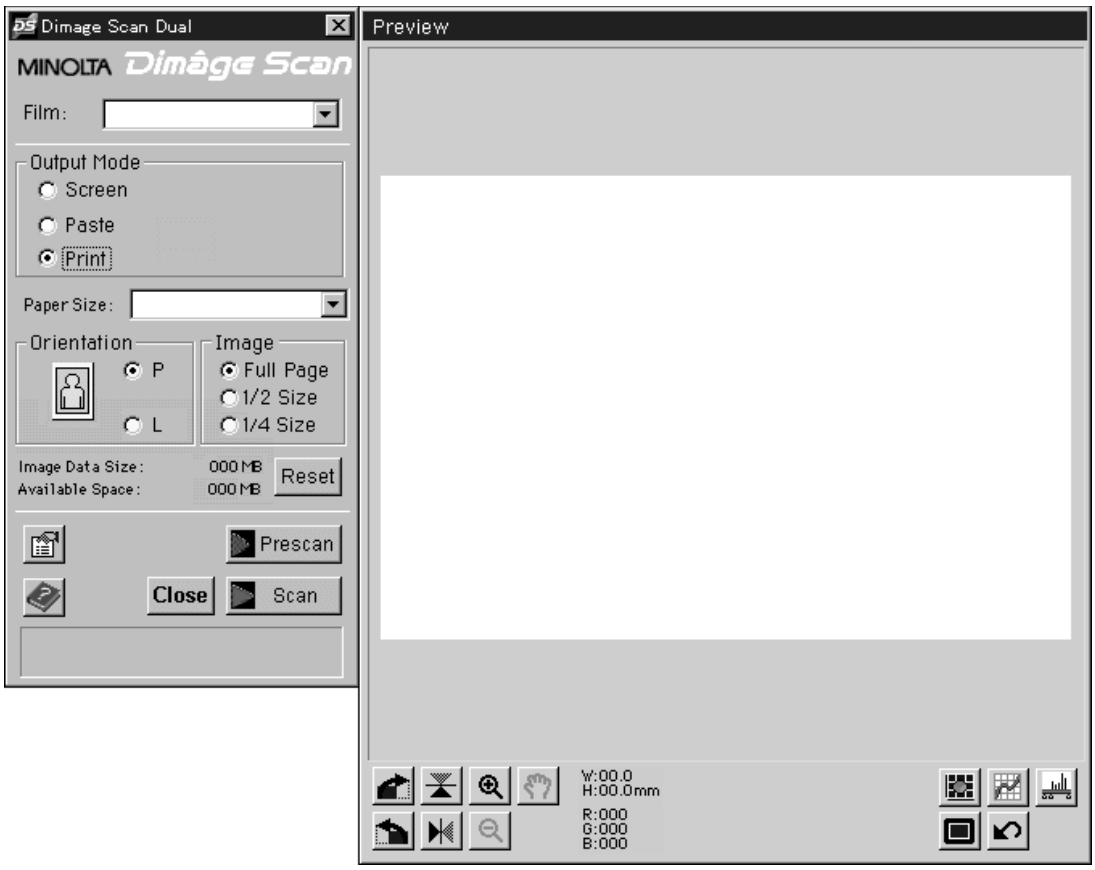
4. **Select DS_dual, then click on Select**

5. **Select File > Import > Twain–32**

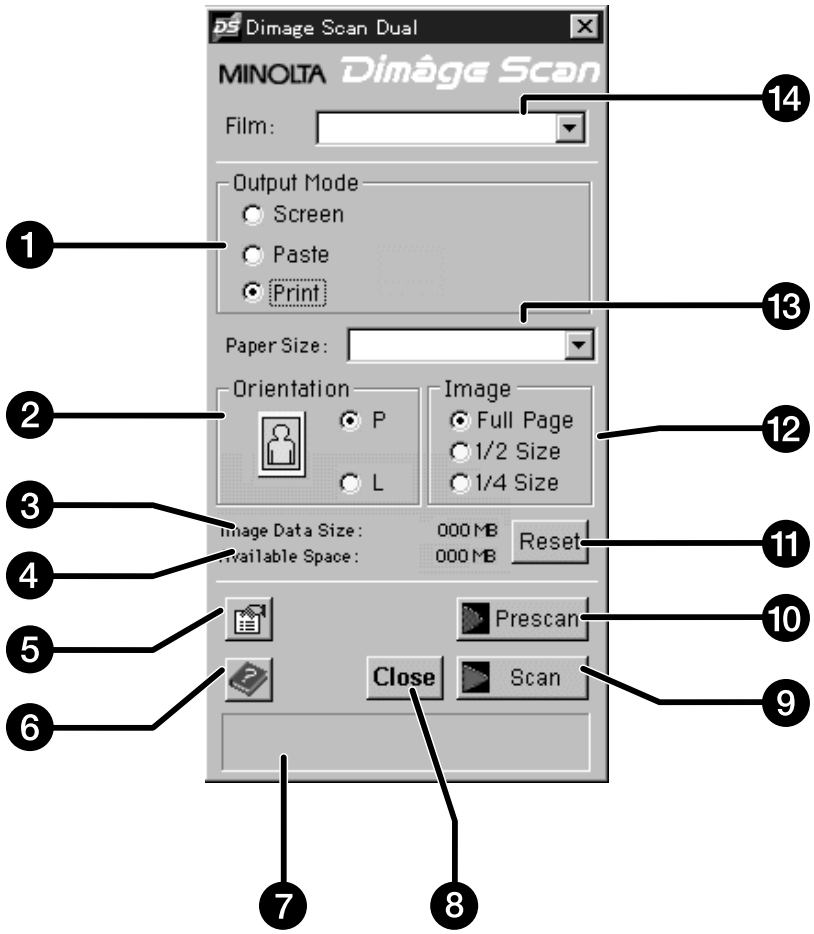


The setup screen will appear.

The Dimâge Scan Dual's standard control and preview windows appear after initialization is complete (approx. 2 min.).

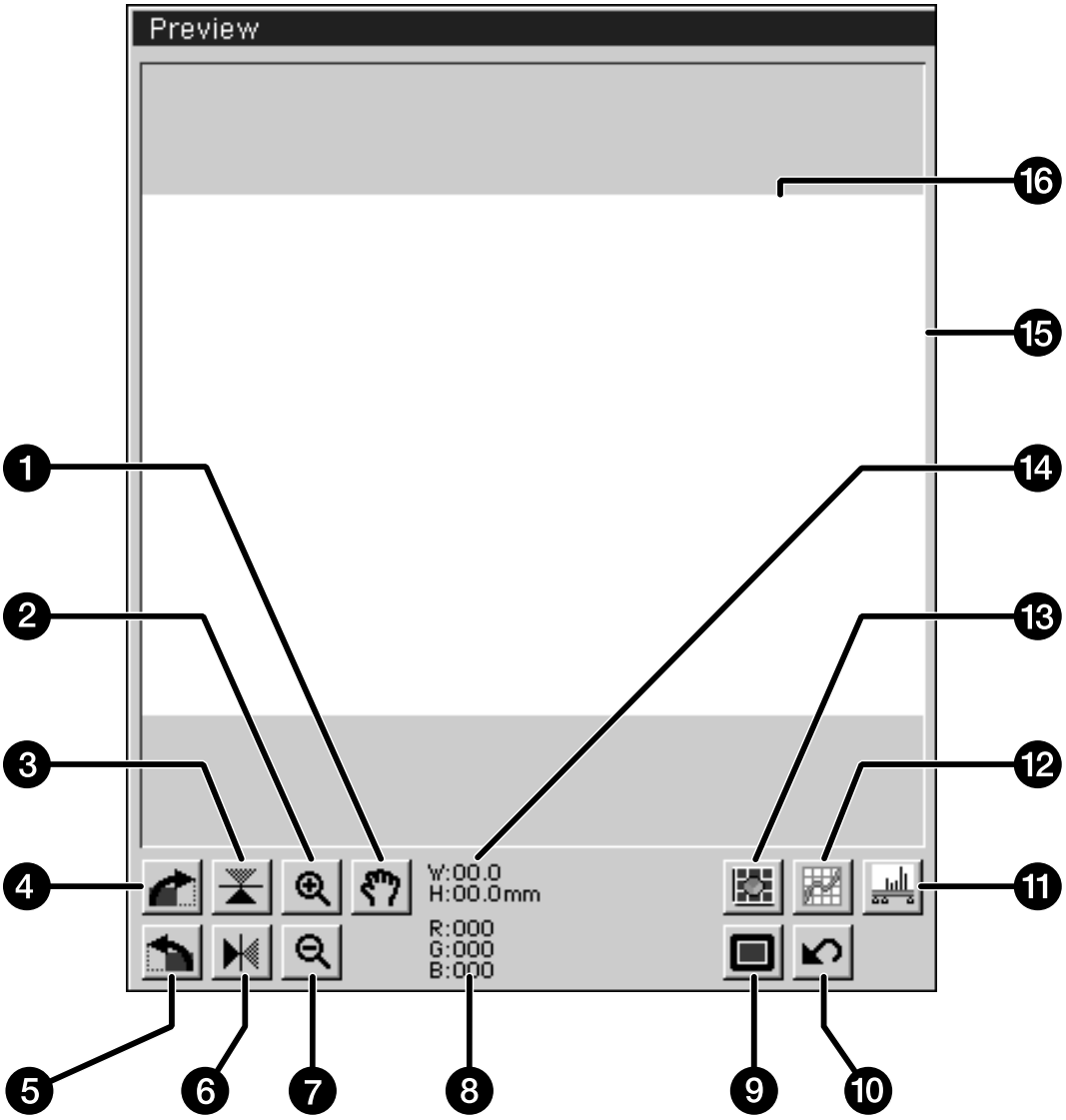


STANDARD CONTROL WINDOW – NAMES OF PARTS



1. Image use option buttons
2. Image orientation option buttons
3. File size
4. Saving drive storage capacity
5. Preference button
6. Help button
7. Status window
8. Exit button
9. Scan button
10. Prescan button
11. Reset button
12. Relative image size option buttons
13. Image/Paper size list box
14. Film type list box

PREVIEW WINDOW – NAMES OF PARTS

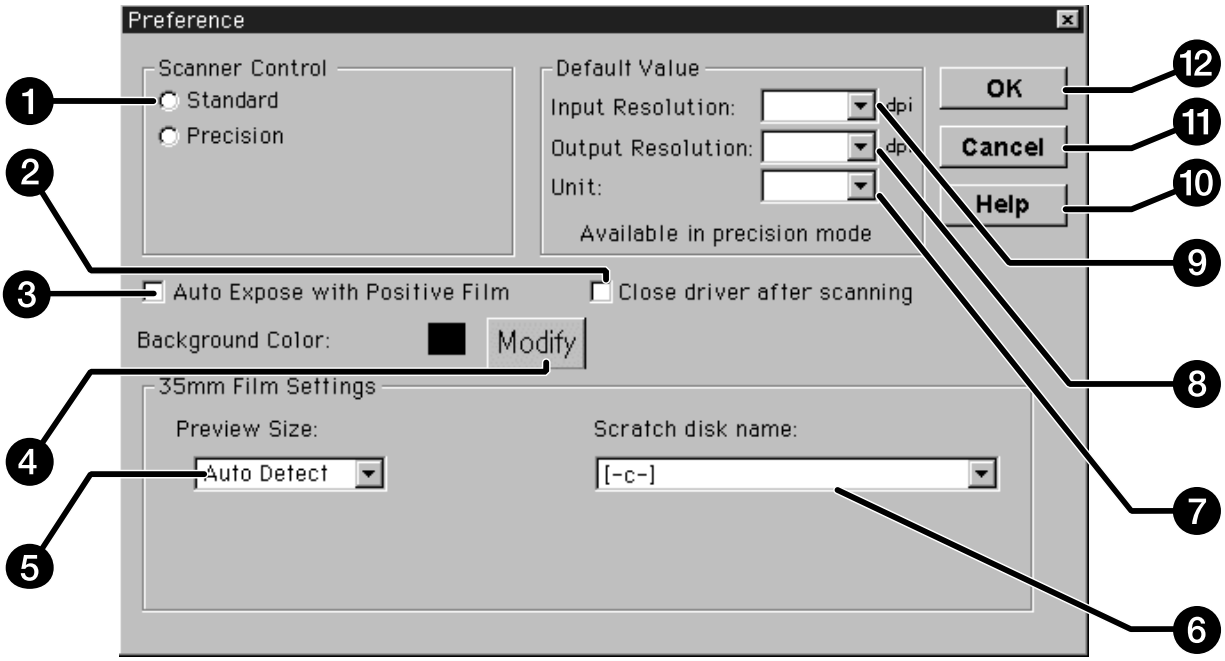


1. Grab button
2. Enlarge button
3. Flip vertical
4. Rotate 90° right
5. Rotate 90° left
6. Flip horizontal
7. Reduce button
8. RGB values under cursor
9. Full-screen display button
10. Revert to prescan settings button
11. Histogram button
12. Curves button
13. Variations button
14. Cropping frame dimensions
15. Cropping frame
16. Preview window

PREFERENCES DIALOG BOX – NAMES OF PARTS

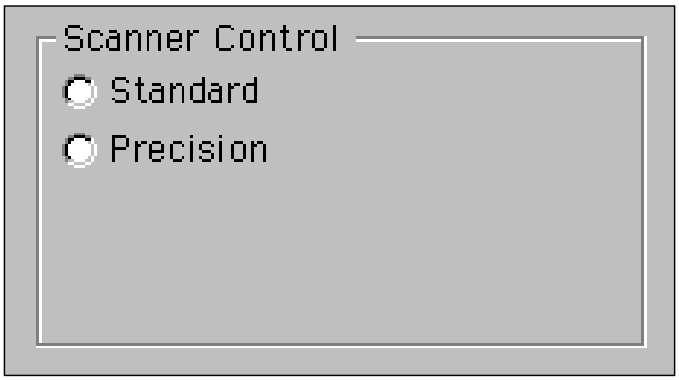
1. Click on .

The Preferences dialog box will appear.



1. Scanner control option buttons
2. Close driver after scan checkbox
3. Auto expose positive film checkbox
4. Background colour modify button
5. Preview window size list box
6. Scratch disk list box
7. Unit list box
8. Output resolution list box
9. Input resolution list box
10. Help button
11. Cancel changes button
12. OK Button

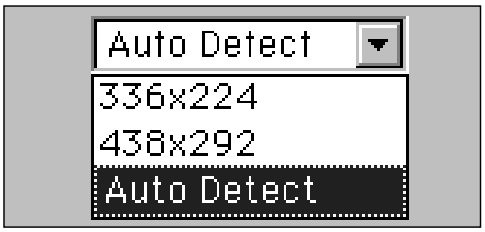
2. Click on the Standard option button.



3. Click on this checkbox if you want to use the auto-exposure system when scanning slides.

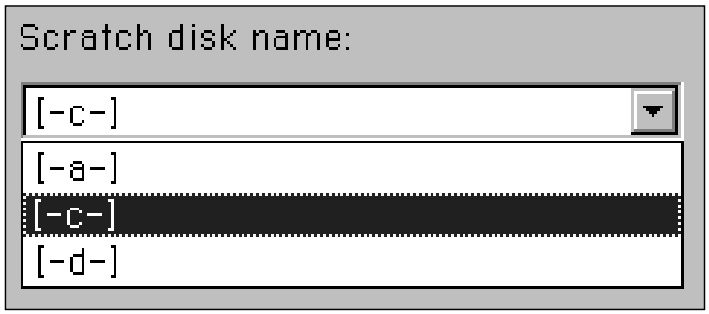
- You will obtain better scans from underexposed slide film when this checkbox is selected.

4. Select the desired preview window size from the drop-down list.



5. Select the saving directory.

- The number of options depends on the number of drives connected to your system.



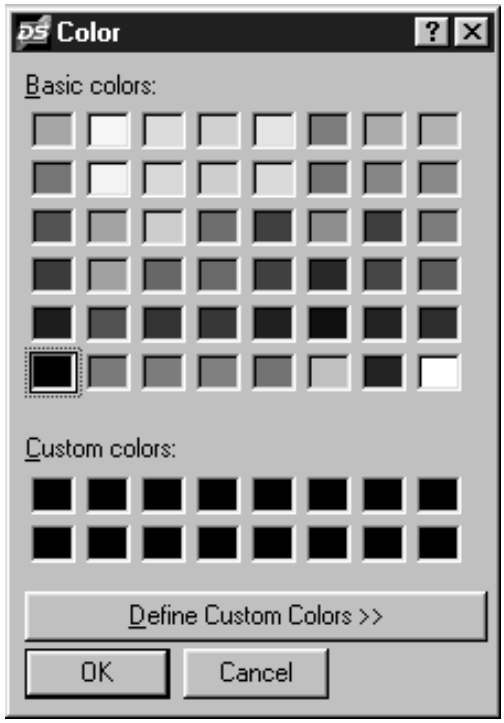
6. Click on the “Close driver after scanning” checkbox to automatically shut down the driver software after scanning.

Continued on the following page.

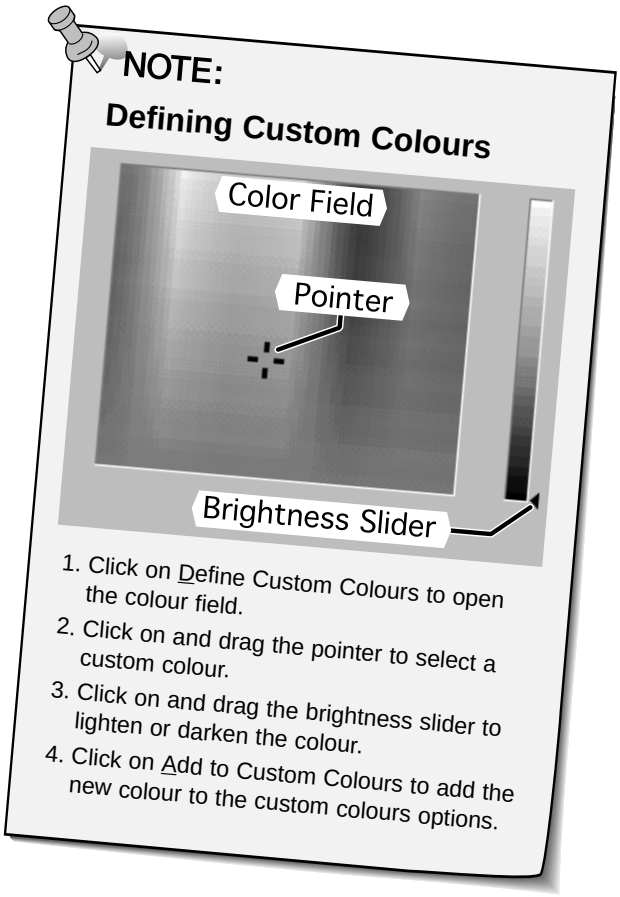
7. Click on Modify to change the background colour of the full screen display.

- The colour chip displays the background colour currently selected.

The Colour Palette dialog box will appear.



8. Click on the desired background colour, then click on OK.


NOTE:
Defining Custom Colours
Color Field
Pointer
Brightness Slider
1. Click on Define Custom Colours to open the colour field.
2. Click on and drag the pointer to select a custom colour.
3. Click on and drag the brightness slider to lighten or darken the colour.
4. Click on Add to Custom Colours to add the new colour to the custom colours options.

9. Click on OK to accept the new preference settings.

LOADING THE FILM HOLDER

Using the included 35mm negative and slide holders, the Minolta Dimâge Scan Dual can scan mounted or unmounted…

- 35mm colour negatives
- 35mm black & white negatives
- 35mm colour slides
- 35mm black & white positives

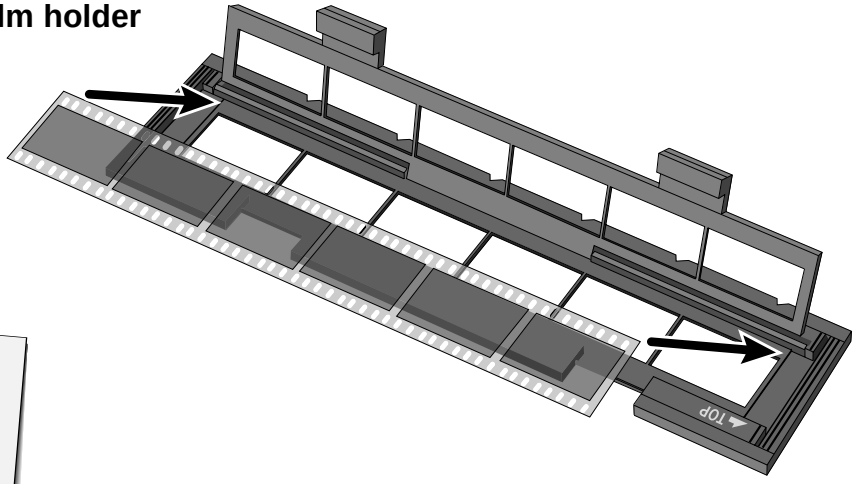
Advanced Photo System negatives and slides can also be scanned using the optional AD-10 APS Adapter. See page 57.

Loading the Negative Holder

1. Open the film holder.

2. Place the film in the film holder emulsion side down.

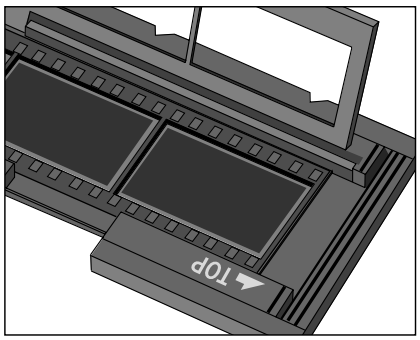
- The film holder will accept film strips up to 6 frames long.
- Brush dust off the film before placing it into the film holder.



NOTE:

The frame numbers and text are backwards when the film's emulsion side is up.

3. Align the frames within the scanning windows.

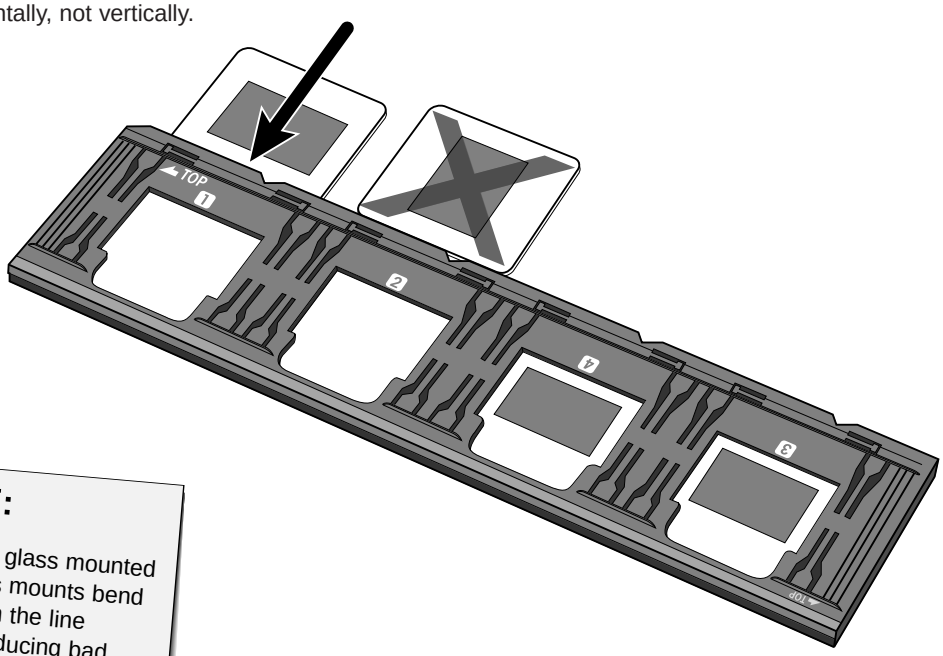


4. Snap the film holder closed.

Loading the Slide Holder

Insert slides into the slide holder emulsion side down.

- Brush dust off the the slide before placing it into the film holder.
- Slide mounts must be thicker than 1 mm and thinner than 2 mm to fit into the slide holder.
- Orient the slides horizontally, not vertically.



NOTE:

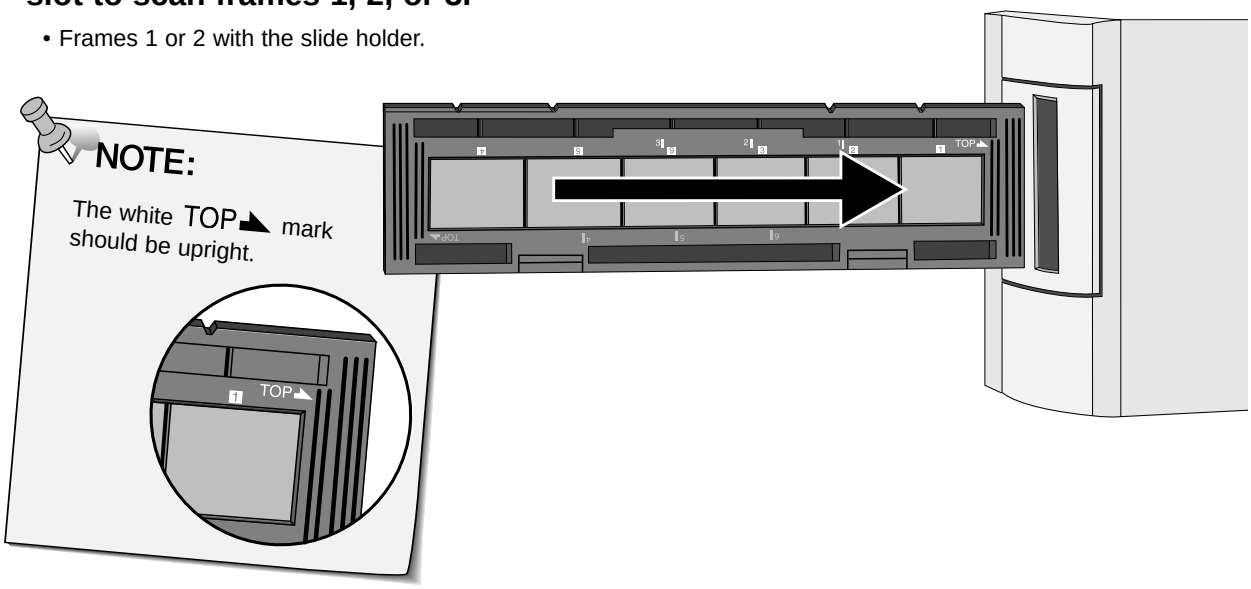
Do not scan glass mounted slides. Glass mounts bend the light from the line scanner, producing bad results.

INSERTING THE FILM HOLDER INTO THE SCANNER

The notches in the film and slide holders identify the position of the scanning windows. Push the holder in all the way in to scan the last frame on that side of the film holder. Remove, flip, then reinsert the film holder to scan the frames on the other side of the holder.

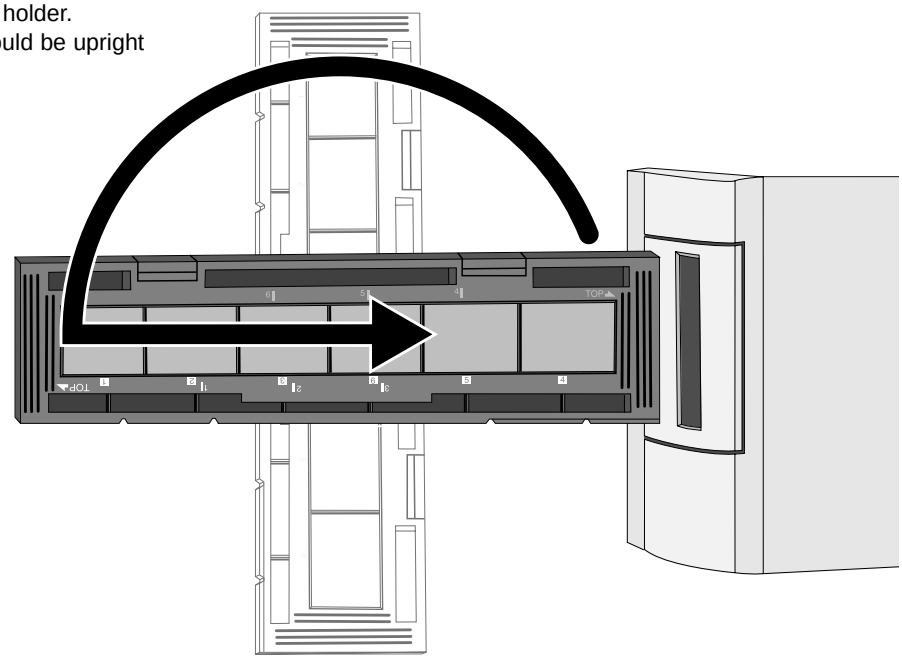
Insert the negative holder into the scanner's film slot to scan frames 1, 2, or 3.

- Frames 1 or 2 with the slide holder.



Remove, flip, then reinsert the negative holder to scan frames 4, 5, or 6.

- Frames 3 or 4 with the slide holder.
- The blue TOP mark should be upright



SETTING THE FILM TYPE / PRESCAN

Setting the type of film you are scanning is necessary to accurately reproduce the image. When 35mm film is being scanned, select colour negative, colour positive, black & white negative, or black & white positive. Refer to pages 54-62 when you are scanning Advanced Photo System film.

Select the type of film you are scanning from the film type drop-down list.

- The selected film type will be displayed in the film type window.
- Refer to pages 54-62 if you are scanning an APS film type.

Prescan

Click on Prescan to preview the image.

- The indicator lamp blinks slowly (0.5 Hz) during prescan.

The prescanned image will appear in preview window.

- The Preview and Control windows can be moved to any convenient location on the screen. Grab the title bar to move the preview or control windows.

NOTE:

Press the option key when clicking on Prescan to improve the colour accuracy of the prescan image.

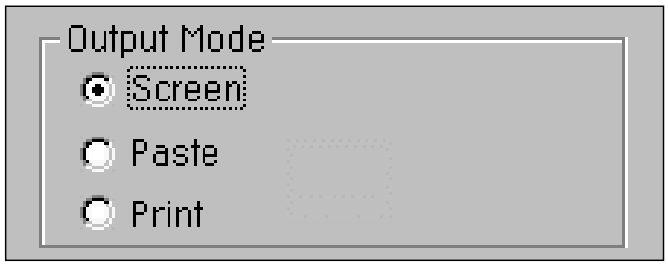
- The film will be prescanned twice. The first scan will set the exposure. The second prescans the image.

SELECTING THE USAGE MODE

Standard mode has three image usage options to simplify operation of the Dimâge Scan Dual for beginners.

Screen – Image will be viewed on a monitor (image data base or home page).
Paste – Image will be imported into a word processing document.
Print – Image will be printed or modified using Photoshop or PhotoDeluxe.

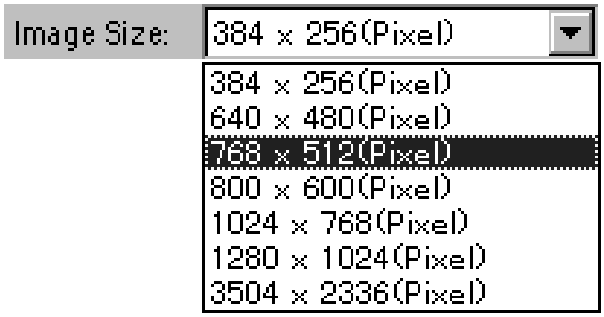
1. Click on the option button for the desired usage mode.



Screen

2. Select the desired image size from the image size drop-down list.

- When selected, your image will be scanned at a 96 dpi resolution.



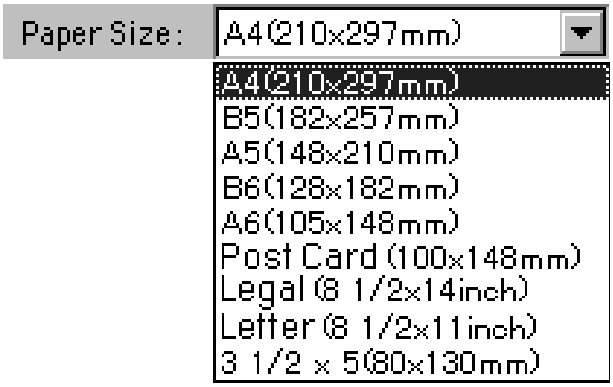
The table below lists the display size for each image size in the drop-down list for monitors with a screen resolution of 72 dpi.

Image Size (pixels)	Approx. Screen Image Size	Approx. File Size
384 x 256	4.83 x 3.56 in.	263K
640 x 480	8.89 x 6.67 in.	907K
768 x 512	10.67 x 7.11 in.	1.2MB
800 x 600	11.11 x 8.33 in.	1.4MB
1024 x 768	14.22 x 10.67 in.	2.3MB
1280 x 1024	17.78 x 14.22 in.	3.9MB
3504 x 2336	48.67 x 32.44 in.	24.2MB

Continued on the following page.

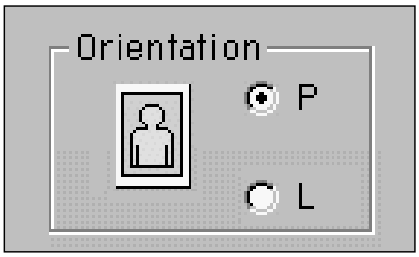
Paste

2. Select the word processing document's paper size from the paper size drop-down list.



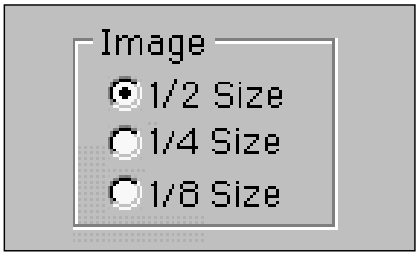
3. Click on the landscape (horizontal) or portrait (vertical) print orientation option button.

- Image orientation only affects the orientation of the prescan and scanned images. Set the correct paper orientation in your printer driver and word processing application.



4. Click on the desired image size option button.

- The actual size of the image depends on the paper size selected in step 2.
- The image will be scanned at a resolution of 96 dpi.
- The page orientation icon changes according to the image size selected.



Print

2. Select a paper size from the paper size drop-down list.

- Image orientation only affects the orientation of the prescan and scanned images. Set the correct paper orientation in your printer driver.

3. Click on the landscape (horizontal) or portrait (vertical) print orientation option button.

4. Click on the desired image size option button.

- The actual size of the image depends on the paper size selected in step 2.
- The image will be scanned at a resolution of 180 dpi.